

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-16. (canceled)

17. (currently amended) A method for manufacturing a cutting balloon catheter, comprising the steps of:

providing a joining member;

providing a metallic cutting blade having a longitudinal axis, the cutting blade having a cutting surface, ~~a top surface~~; and a base having a lower surface, the base including an interlocking structure defined by a plurality of openings formed in the metallic cutting blade along the base such that an imaginary plane perpendicular to the longitudinal axis which passes through one of the plurality of openings also passes through material of the base located between the opening and the lower surface of the base;

~~forming a plurality of openings in the metallic cutting blade along the base to define an interlocking surface;~~

softening the joining member;

positioning the cutting blade adjacent the joining member so that the interlocking structure surface is submerged within and interlocked with the joining member ~~and so that a portion of the top surface is submerged within the joining member;~~

solidifying the joining member so that the cutting blade and the joining member are secured to one another; and

attaching the joining member and the cutting blade to an angioplasty balloon.

18. (original) The method of claim 17, wherein the step of softening the joining member includes heating the strip.

19. (original) The method of claim 18, wherein heating the joining member includes heating the joining member with a laser.

20. (original) The method of claim 18, wherein heating the joining member includes melting the joining member.

21. (withdrawn) The method of claim 17, wherein the step of softening the joining member includes at least partially solvating the joining member with a solvent.

22. (original) The method of claim 17, wherein the step of attaching the joining member and the cutting blade to an angioplasty balloon includes heating the joining member.

23. (original) The method of claim 22, wherein heating includes heating the joining member with a laser.

24. (withdrawn) The method of claim 17, wherein the step of attaching the joining member and the cutting blade to an angioplasty balloon includes at least partially solvating the joining member with a solvent.

25. (original) The method of claim 17, further comprising the step of disposing a second cutting blade adjacent the joining member.

26. (withdrawn) A cutting balloon catheter, comprising:
an elongate catheter shaft;
a balloon coupled to the catheter shaft;
a polymeric joining member attached to the balloon; and
a cutting members coupled to the joining member, the cutting member including a cutting surface and a slotted base, the slotted base being submerged within the joining member.

27. (previously presented) The method of claim 17, wherein forming a plurality of openings in the metallic cutting blade along the base to define an interlocking surface includes a wire electric discharge milling technique.

28. (new) The method of claim 17, wherein the lower surface of the base is submerged within the joining member to a depth such that the lower surface is spaced from a bottom surface of the joining member.

29. (new) The method of claim 28, wherein the bottom surface of the joining member is bonded to the angioplasty balloon.

30. (new) The method of claim 17, wherein softened material of the joining member flows into the plurality of openings.